WEST Search History

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DATE: Thursday, June 08, 2006

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT; PLUR=YES; OP=OR	
☐	L21	l13 and L18	2
☐	L20	l13 and L19	2
☐	L19	U6 and L18	406
☐	L18	pol adj III	3673
☐	L17	Sph adj I same pol adj III	0
☐	L16	Sph adj I with first same siRNA	0
☐	L15	Sph adj I with first same u6	0
☐	L14	Sph adj I with promoter with first	18
☐	L13	Sph adj I with promoter	157
☐	L12	Sph adj I same promoter	332
☐	L11	Sph adj I same pol adj III	0
☐	L10	Sph adj I with pol adj III	0
☐	L9	Sph I with pol adj III	3352
☐	L8	(promoter near5 modif$ same first) and L2	1
☐	L7	6114304.pn.	1
☐	L6	10/643681	1
☐	L5	promoter near5 modif$ and L2	1
☐	L4	first near5 base and L2	1
☐	L3	first adj base and L2	1
☐	L2	20040115815.pn.	1
☐	L1	2004011581.pn.	0

END OF SEARCH HISTORY

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DATE: Thursday, June 08, 2006

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT; PLUR=YES; OP=OR		
☐	L12	l8 and L11	1
☐	L11	10/202,479	1
	DB=USPT; PLUR=YES; OP=OR		
☐	L10	pol adj III same (TTTT OR TTTTT)	0
	DB=PGPB,USPT; PLUR=YES; OP=OR		
☐	L9	l4 and L8	4
☐	L8	pol adj III same (TTTT OR TTTTT)	11
☐	L7	l4 and l5	9
☐	L6	l4 and l5L5	0
☐	L5	pol adj III same thymidine same termin$	312
☐	L4	pol adj III same TATA	41
☐	L3	20040005593.pn. and TATA	1
☐	L2	20040005593.pn.	1
☐	L1	10/628587	2

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NEWS 11	APR 03	Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL
NEWS 12	APR 04	STN AnaVist $500 visualization usage credit offered
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NEWS 14	APR 12	Improved structure highlighting in FQHIT and QHIT display in MARPAT
NEWS 15	APR 12	Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected
NEWS 16	MAY 10	CA/CAplus enhanced with 1900-1906 U.S. patent records
NEWS 17	MAY 11	KOREAPAT updates resume
NEWS 18	MAY 19	Derwent World Patents Index to be reloaded and enhanced
NEWS 19	MAY 30	IPC 8 Rolled-up Core codes added to CA/CAplus and USPATFULL/USPAT2
NEWS 20	MAY 30	The F-Term thesaurus is now available in CA/CAplus
NEWS 21	JUN 02	The first reclassification of IPC codes now complete in INPADOC
NEWS EXPRESS		FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/
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=> fil medline biosis caplus scisearch embase wpids
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=> Sph (w) I
L1 263 SPH (W) I

=> pol (w) III
'III' IS NOT VALID HERE
Only a single L-number or accession number may be entered.

=> "pol III"
L2 2723 "POL III"

=> l1 and l2
L3 0 L1 AND L2

=> polIII
L4 308 POLIII

=> l4 and l1
L5 0 L4 AND L1

=> promoter
L6 680586 PROMOTER

=> l1 and l6
L7 45 L1 AND L6

=> d scan

L7 45 ANSWERS CAPLUS COPYRIGHT 2006 ACS on STN
IC ICM C12N015-00
CC 3-1 (Biochemical Genetics)
TI Preparation of bacteriophage cloning vectors
ST bacteriophage vector arm prepn; Escherichia gene cloning KIS

IT Escherichia coli
Molecular cloning
(bacteriophage vector containing multicloning sites for, preparation of)
IT Plasmid and Episome
(pUC1080N, bacteriophage vector, multicloning sites in)
IT Plasmid and Episome
(pUC1081N, bacteriophage vector, multicloning sites in)
IT Plasmid and Episome
(pUC1082N, bacteriophage vector, multicloning sites in)
IT Plasmid and Episome
(pUC1090N, bacteriophage vector, multicloning sites in)
IT Plasmid and Episome
(pUC1091N, bacteriophage vector, multicloning sites in)
IT Plasmid and Episome
(pUC1092N, bacteriophage vector, multicloning sites in)
IT Gene and Genetic element, microbial
RL: BIOL (Biological study)
(lac, **promoter** of, bacteriophage cloning vector using)
IT Gene and Genetic element, microbial
RL: BIOL (Biological study)
(lacZ, **promoter** of, bacteriophage cloning vector using)
IT 80498-17-5, Restriction endonuclease Eco RI 81295-08-1, Restriction endonuclease Bal I 81295-09-2, Restriction endonuclease BamHI 81295-12-7, Restriction endonuclease Bgl II 81295-22-9, Restriction endonuclease Hind III 81295-27-4, Restriction endonuclease Kpn I 81295-32-1, Restriction endonuclease Pst I 81295-35-4, Restriction endonuclease Sac I 81295-36-5, Restriction endonuclease Sac II 81295-38-7, Restriction endonuclease Sal I 81295-43-4, Restriction endonuclease Xho I 81458-04-0, Restriction endonuclease Mlu I 81811-55-4, Restriction endonuclease Hinc II 82391-42-2, Restriction endonuclease Sma I 83589-01-9, Restriction endonuclease Cla I 83589-02-0, Restriction endonuclease Eco RV 84067-31-2, Restriction endonuclease Aat II 84788-83-0, Restriction endonuclease Stu I 85270-15-1, Restriction endonuclease **Sph I** 86352-26-3, Restriction endonuclease Nsi I 86352-32-1, Restriction endonuclease Sna I 86922-64-7, Restriction endonuclease Apa I 87683-74-7, Restriction endonuclease Acc I 88086-22-0, Restriction endonuclease Eco 47III 90463-50-6, Restriction endonuclease Nae I 90463-51-7, Restriction endonuclease Eco52I 92228-44-9, Restriction endonuclease Nco I 92228-46-1, Restriction endonuclease Nru I 102227-44-1, Restriction endonuclease Spl I 103780-21-8, Restriction endonuclease Sna BI 124834-24-8, Restriction endonuclease Acc III 131689-51-5, Restriction endonuclease Bse PI 131689-52-6, Restriction endonuclease Nsp(7254)V 131689-53-7, Restriction endonuclease Pma VI
RL: PRP (Properties)
(cleavage site for, bacteriophage cloning vector for cloning into)
IT 122983-95-3 122983-96-4 122983-97-5 122984-02-5 122984-03-6 122984-04-7 122984-05-8 122984-07-0
RL: PRP (Properties)
(multicloning site of bacteriophage cloning vector containing)
IT 90730-90-8 92610-94-1 131651-43-9
RL: PRP (Properties)
(restriction enzyme cleavage site, bacteriophage vector for cloning into)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> dup rem l7
PROCESSING COMPLETED FOR L7
L8 26 DUP REM L7 (19 DUPLICATES REMOVED)

=> t ti l8 1-26

L8 ANSWER 1 OF 26 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 1
TI Construction of recombined plasmid carrying Cry1Ac gene and expression of insecticidal activities in Bacillus subtilis.

L8 ANSWER 2 OF 26 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 2
TI The promoting function of long terminal repeat from reticuendotheliosis virus.

L8 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI Partial Function of **Promoter** and Enhancer of pp38 Gene of Marek's Disease Virus

L8 ANSWER 4 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI New hybrid plasmid pZZSA coding for a chimeric angiogenin protein useful e.g. for promoting angiogenesis in the treatment of burns, traumatic wounds, hematopoietic disorders, ulcers, varicose veins, endarteritis and skin diseases.

L8 ANSWER 5 OF 26 MEDLINE on STN DUPLICATE 3
TI Genetically marking of natural biocontrol bacterium Bacillus subtilis strains with green fluorescent protein gene.

L8 ANSWER 6 OF 26 MEDLINE on STN DUPLICATE 4
TI Expression of gene aiiA carrying the **promoter** of gene cry3Aa in Bacillus thuringiensis.

L8 ANSWER 7 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5
TI Cloning and sequence analysis of two catechol-degrading gene clusters from a phenol-utilizing bacterium Pseudomonas putida SM25

L8 ANSWER 8 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Vector pMT440 - for use in cloning fragments of foreign DNA in various strains of Escherichia coli.

L8 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI Multiple cis-acting elements regulate angiotensinogen gene expression

L8 ANSWER 10 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI Involvement of a protein distinct from transcription enhancer factor-1 (TEF-1) in mediating human chorionic somatomammotropin gene enhancer function through the GT-IIC enhanson in choriocarcinoma and COS cells

L8 ANSWER 11 OF 26 MEDLINE on STN DUPLICATE 6
TI Involvement of a protein distinct from transcription enhancer factor-1 (TEF-1) in mediating human chorionic somatomammotropin gene enhancer function through the GT-IIC enhanson in choriocarcinoma and COS cells.

L8 ANSWER 12 OF 26 MEDLINE on STN DUPLICATE 7
TI A beta-galactosidase expression vector for **promoter** analysis.

L8 ANSWER 13 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI High expression vector for manufacturing proteins with Bacillus

L8 ANSWER 14 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Modified upstream activated sequence for protein preparation - prepared from yeast glycerol-3-phosphate dehydrogenase 3 gene.

L8 ANSWER 15 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Vector-DNA for screening of **promoter** capable of high temperature

expression - has marker gene with **promoter**, colouring gene marker gene, different marker gene and vector DNA.

L8 ANSWER 16 OF 26 MEDLINE on STN DUPLICATE 8
TI trans activation of the simian virus 40 late **promoter** by large T antigen requires binding sites for the cellular transcription factor TEF-1.

L8 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 9
TI Preparation of bacteriophage cloning vectors

L8 ANSWER 18 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Streptomyces beta-galactosidase protein gene **promoter** - obtd. from Streptomyces lividans strain and used for expressing heterologous genes.

L8 ANSWER 19 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI New peptide NOS having specific aminoacid sequence - used to localise protein in nucleolus.

L8 ANSWER 20 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI Synthesis, characterization, and isomerization behavior of syn-(μ-η3-1-methylallyl)(μ-benzenethiolato)bis(tricyclohexylphos phine)dipalladium(I), [(C6H11)3P]2Pd2(syn-μ-η3-CH2CHCHCH3)(μ-SC6H5) and its anti isomer

L8 ANSWER 21 OF 26 MEDLINE on STN DUPLICATE 10
TI Nucleotide sequence of the macromomycin apoprotein gene and its expression in Streptomyces macromomyceticus.

L8 ANSWER 22 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI New streptomyces vector **promoter** arrangement - comprising two promoters in tandem.

L8 ANSWER 23 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
TI Plasmids containing gene encoding modified human interleukin 2

L8 ANSWER 24 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI DNA fragment containing Streptomyces beta-galactosidase gene - obtd. from Streptomyces lividans strain 1326 chromosomal DNA.

L8 ANSWER 25 OF 26 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
TI MOLECULAR CLONING OF A XYLANASE GENE FROM STREPTOMYCES-SP NO. 36A AND ITS EXPRESSION IN STREPTOMYCETES.

L8 ANSWER 26 OF 26 MEDLINE on STN DUPLICATE 11
TI Construction and application of a novel plasmid "ATG vector" for direct expression of foreign genes in Escherichia coli.

=> d ibib abs 18 8, 9, 17, 18, 21, 22, 24, 26

L8 ANSWER 8 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1998-493575 [42] WPIDS
DOC. NO. CPI: C1998-148515
TITLE: Vector pMT440 - for use in cloning fragments of foreign DNA in various strains of Escherichia coli.
DERWENT CLASS: B04 D16
INVENTOR(S): DEEV, S M; YAZYNIN, S A
PATENT ASSIGNEE(S): (ASMO-R) AS USSR MOLECULAR BIOLOGY INST
COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
RU 2105064	C1	19980220	(199842)*		4

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
RU 2105064	C1	RU 1996-114482	19960719

PRIORITY APPLN. INFO: RU 1996-114482 19960719
AN 1998-493575 [42] WPIDS
AB RU 2105064 C UPAB: 19981021
Vector pMT440 with positive selection for cloning fragments of foreign DNA of size 2936 p.o., contains: structural barnase gene, subcloned from Bacillus amyloliquetaciens under control of synthetic tac **promoter** ; universal poly-linker of plasmid pUC19, consisting of 45 p.o., incorporated into barnase gene and replacing Valine 36; pho A, a signal sequence of Escherichia coli, which ensures secretion of barnase into periplasm of bacterial cell; gene of specific inhibitor of barnase barstar, under its natural **promoter**; fragment of plasmid pUC19, including section of start of replication ori; and gene Ampr, determining resistance to ampicillin in E. coli cells. Sites of restriction are at following positions in poly-linker, from the point of replication of plasmid DNA: EcoRI 300 p.o., Sac I 306 p.o., Kpn I 312 p.o., Sma I 316 p.o., BamH I 321 p.o., Sal I 333 p.o., Pst I 339 p.o., **Sph I** 345 p.o. and Hind III 351 p.o., and incorporation of foreign genes can be conducted using restriction sites in poly-linker, at the volume of incorporated DNA equal 6 p.o.

USE - In biotechnology and genetic engineering, as vector pMT440 for cloning fragments of foreign DNA.

ADVANTAGE - The vector ensures highly effective positive selection of cloned fragments of foreign DNA in various strains of Escherichia coli. Dwg.0/0

L8 ANSWER 9 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:756795 CAPLUS
DOCUMENT NUMBER: 130:77023
TITLE: Multiple cis-acting elements regulate angiotensinogen gene expression
AUTHOR(S): Zhao, Yan-Yan; Sun, Kai-Lai
CORPORATE SOURCE: Dep. Med. Genetics, China Med. Univ., Shenyang, 110001, Peop. Rep. China
SOURCE: Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao (1998), 14(5), 492-497
CODEN: ZSHXF2; ISSN: 1007-7626
PUBLISHER: Zhongguo Shengwu Huaxue Yu Fenzi Shengwu Xuebao Bianweihui
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB In order to understand the regulation of the human angiotensinogen gene expression, A 1220 bp fragment of the human angiotensinogen gene **promoter** that include 44 bp of the first exon was isolated. The fragment was directly cloned in the pGEM-T vector and subsequently subcloned through Sal I and **Sph I** restriction site in front of the chloramphenicol acetyl transferase (CAT) gene of pSVCAT-Basic vector. The 5'-sequential deletion mutants were obtained from the human angiotensinogen **promoter** attached to the CAT gene. An array of expression vectors were introduced into HepG2 and COS-7 cells by calcium

phosphate precipitation transfection technique. The CAT activity was assayed using 14C-chloramphenicol as substrate. Results of transient transfection suggested two neg. regulatory fragments at -850.apprx.-580 and -420.apprx.-220 and two pos. regulatory fragments at-580.apprx.-420 and -220.apprx.+1. Two synthetic oligonucleotides, homol. with IL-6 responsive element and estrogen responsive element in pos. regulatory fragments, were further analyzed by electrophoretic mobility shift assay and showed DNA-protein binding bands using nuclear extract from COS-7 and HepG2 cells. Thus, expression of the human angiotensinogen gene is coordinately regulated by multiple cis-acting elements that interact with DNA binding proteins.

L8 ANSWER 17 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 9
ACCESSION NUMBER: 1991:76379 CAPLUS
DOCUMENT NUMBER: 114:76379
TITLE: Preparation of bacteriophage cloning vectors
INVENTOR(S): Kanda, Tomomasa; Saigo, Kaoru; Shibuya, Ichiro
PATENT ASSIGNEE(S): Nikka Whisky Distilling Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01277491	A2	19891107	JP 1988-107318	19880428
JP 2746599	B2	19980506		
PRIORITY APPLN. INFO.:			JP 1988-107318	19880428

AB Bacteriophage vector arms for cloning in Escherichia coli comprise: (1) an upstream arm with a lac gene **promoter** and multicloning sites and a downstream arm with a lacZ gene and multicloning sites. Such KIS vector system is designed for simplifying cloning procedures. Constructionsof plasmids pUC1090N, pUC1091N, pUC1092N, pUC1080N, pUC1081N, and pUC1082N as well as the application of pUC1090N in cloning of a tetracycline-resistance gene in E. coli were described.

L8 ANSWER 18 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1989-308994 [42] WPIDS
DOC. NO. CPI: C1989-136824
TITLE: Streptomyces beta-galactosidase protein gene **promoter** - obtd. from Streptomyces lividans strain and used for expressing heterologous genes.
DERWENT CLASS: B04 D16
INVENTOR(S): BURNETT, W V; ECKHARDT, T G; FARE, L R
PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BECKMAN CORP
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 4859601	A	19890822	(198942)*		7

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 4859601	A	US 1986-820345	19860121

PRIORITY APPLN. INFO: US 1984-585496 19840305; US

1986-820345 19860121

AN 1989-308994 [42] WPIDS

AB US 4859601 A UPAB: 19930923

DNA fragment is claimed comprising Streptomyces Bgl protein gene **promoter**. The **promoter** is further characterised in that it is derived from a 16 kb **Sph I** region of Streptomyces lividans chromosomal DNA, the **promoter** in its natural state being upstream of a gene for an excretable beta-galactosidase in the region. It may be derived from a 0.7 kb Pvu II-Stu I region of S.lividans strain 1326 chromosomal DNA. Also claimed are a recombinant DNA vector comprising the **promoter** and microorganisms transformed with the vector. USE - Bgl protein gene **promoter** can be used for expressing heterologous coding sequences, e.g. in other Streptomyces species and strains.

0/2

L8 ANSWER 21 OF 26 MEDLINE on STN DUPLICATE 10

ACCESSION NUMBER: 90061944 MEDLINE

DOCUMENT NUMBER: PubMed ID: 2479629

TITLE: Nucleotide sequence of the macromomycin apoprotein gene and its expression in Streptomyces macromomyceticus.

AUTHOR: Sakata N; Kanbe T; Tanabe M; Hayashi H; Hori M; Hotta K; Hamada M

CORPORATE SOURCE: Showa College of Pharmaceutical Sciences, Tokyo, Japan.

SOURCE: The Journal of antibiotics, (1989 Nov) Vol. 42, No. 11, pp. 1704-12.
Journal code: 0151115. ISSN: 0021-8820.

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

OTHER SOURCE: GENBANK-D90006

ENTRY MONTH: 199001

ENTRY DATE: Entered STN: 28 Mar 1990
Last Updated on STN: 29 Jan 1996
Entered Medline: 4 Jan 1990

AB A 1.6 kb **Sph I**-Sac I DNA fragment from Streptomyces macromomyceticus, expected to include the macromomycin (MCM) apoprotein gene, was sequenced. The fragment (1,556 bp) was found to include a putative **promoter**, an ORF directing pre-apoprotein which should be split into the leader peptide (Met1 to Gly32) and the MCM apoprotein (Ala33 to Ala144), and a putative terminator. The amino acid sequence deduced from the base sequence of the DNA is consistent with the amino acid sequence previously determined by the Edman degradation and other procedures applied to the protein, except base sequence AAC coding for Asn was found rather than Asp111 previously reported. The GC content of the 3rd letters throughout the ORF was 92% in contrast to the sum of the first and the second letters, 62%. There was a low GC content stretch of 20 bp (30% GC) at about 120 bp upstream of the ORF. The Pst I-**Sph I** 620 bp fragment including the low GC content stretch showed **promoter** activity when subcloned in a **promoter** probe vector. About 700 nucleotides long mRNA, which is long enough to span the ORF and the bordering regions, was identified using the Northern blot analysis. A primer extension experiment showed that the transcriptional starting point was A at 89 bp upstream of the ORF. Dot blot analysis of expression of MCM apoprotein gene indicated that the gene was expressed nearly constitutively, while production of holo MCM (the complex consisting of MCM apoprotein and a specific chromophore) depended greatly on culture conditions.

L8 ANSWER 22 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER: 1987-102675 [15] WPIDS

DOC. NO. CPI: C1987-042636
TITLE: New streptomyces vector **promoter** arrangement - comprising two promoters in tandem.
DERWENT CLASS: B04 D16
INVENTOR(S): KOLLER, K P; RIESS, G J
PATENT ASSIGNEE(S): (FARH) HOECHST AG
COUNTRY COUNT: 25
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 218204	A	19870415	(198715)*	GE	10
R: AT BE CH DE ES FR GB GR IT LI LU NL SE					
DE 3536182	A	19870416	(198716)		
AU 8663634	A	19870416	(198721)		
JP 62100293	A	19870509	(198724)		
NO 8604020	A	19870504	(198724)		
FI 8604071	A	19870411	(198727)		
ZA 8607697	A	19870410	(198727)		
DK 8604826	A	19870411	(198730)		
PT 83519	A	19871111	(198750)		
US 4918007	A	19900417	(199020)		
IL 80250	A	19910718	(199136)		
EP 218204	B	19911211	(199150)		
R: AT BE CH DE ES FR GB GR IT LI LU NL SE					
DE 3682861	G	19920123	(199205)		
CA 1296271	C	19920225	(199214)		
ES 2038118	T3	19930716	(199333)		
FI 91887	B	19940513	(199422)		
NO 175319	B	19940620	(199428)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 218204	A	EP 1986-113627	19861002
DE 3536182	A	DE 1985-3536182	19851010
JP 62100293	A	JP 1986-239432	19861009
ZA 8607697	A	ZA 1986-7697	19861009
US 4918007	A	US 1986-917066	19861008
ES 2038118	T3	EP 1986-113627	19861002
FI 91887	B	FI 1986-4071	19861008
NO 175319	B	NO 1986-4020	19861009

FILING DETAILS:

PATENT NO	KIND	PATENT NO
ES 2038118	T3 Based on	EP 218204
FI 91887	B Previous Publ.	FI 8604071
NO 175319	B Previous Publ.	NO 8604020

PRIORITY APPLN. INFO: DE 1985-3536182 19851010
AN 1987-102675 [15] WPIDS
AB EP 218204 A UPAB: 19930922

New **promoter** arrangement comprises two promoters active in Streptomyces spp., arranged one after the other in the reading frame. Also claimed are vectors containing such an arrangement, and Streptomyces host cells containing the vectors.

The promoters are selected from the 350 bp PstI-SphI fragment of plasmid pIJ702, the 270 bp BclI-SphI fragment of pIJ702, and the 650 bp HincII-SstI fragment (containing a gene coding for the alpha-amylase inhibitor

tendamistate) located within the 0.94 kb PstI-BamHI fragment of plasmid pKAI1. The host is S. lividans.

ADVANTAGE - The tandem arrangement greatly increases protein expression by the host cells.

0/3

ABEQ EP 218204 B UPAB: 19930922

New **promoter** arrangement comprises two promoters active in Streptomyces spp., arranged one after the other in the reading frame. Also claimed are vectors contg. such an arrangement, and Streptomyces host cells contg. the vectors.

The promoters are selected from the 350 bp PstI-SphI fragment of plasmid pIJ702, the 270 bp BclI-SphI fragment of pIJ702, and the 650 bp HincII-SstI fragment (contg. a gene coding for the alpha-amylase inhibitor tendamistate) located within the 0.94 kb PstI-BamHI fragment of plasmid pKAI1. The host is S. lividans.

ADVANTAGE - The tandem arrangement greatly increases protein expression by the host cells.

0/3

ABEQ US 4918007 A UPAB: 19930922

Streptomyces species, e.g., Streptomyces lividans, is modified by including two active promotors in sequence and in the correct reading frame in the DNA sequence of the microorganism. At least one of these promotors is that located in the 350 bp Pst I-**Sph I** fragment of plasmid pIJ 702 or the 650 bp Hinc II-Sst I fragment of plasmid pKAI-1 in the 0.94 kb Pst I-Bam HI fragment.

USE - The modified microorganism exhibits a marked increase in protein expression.

L8 ANSWER 24 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 1986-184540 [29] WPIDS
DOC. NO. CPI: C1986-079363
TITLE: DNA fragment containing Streptomyces beta-galactosidase gene - obtd. from Streptomyces lividans strain 1326 chromosomal DNA.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): BRAWNER, M E; ECKHARDT, T G; FARE, L R
PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP; (SMIK) SMITHKLINE BECKMAN CORP
COUNTRY COUNT: 12
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 187630	A	19860716	(198629)*	EN	21
R: AT BE CH DE FR GB IT LI LU NL SE					
US 4717666	A	19880105	(198803)		
DE 3586652	G	19921022	(199244)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 187630	A	EP 1985-870172	19851209
US 4717666	A	US 1984-681749	19841214
DE 3586652	G	DE 1985-3586652	19851209
		EP 1985-870172	19851209

FILING DETAILS:

PATENT NO	KIND		PATENT NO
DE 3586652	G	Based on	EP 187630

PRIORITY APPLN. INFO: US 1984-681749 19841214; US
1982-384650 19820603; US
1984-586536 19840305

AN 1986-184540 [29] WPIDS

AB EP 187630 A UPAB: 19930922
A DNA fragment contains the Streptomyces beta-galactosidase gene in which the gene is naturally present within the 7 kb Pst I-**Sph** **I** region of Streptomyces lividans strain 1326 chromosomal DNA.

Also claimed are vectors (e.g. plasmid pSKL-1) containing the DNA fragment and microorganisms (e.g. S. lividans strains 1326-9/pSKL-1 and BC6/pSKL-1) transformed with the vectors.

USE/ADVANTAGE - The beta-galactosidase is useful for degradation of certain beta-galactosides such as lactose and can be used as a diagnostic or laboratory reagent. The enzyme is free of naturally occurring contaminants because it is partially or fully purified or because it is produced by a heterologous host.

0/1

ABEQ DE 3586652 G UPAB: 19930922
Excretable beta-galactosidase (I) isolated from other excreted prods. is new. DNA fragment comprising a gene naturally present in Streptomyces sp. and coding for an excretable (I) is new. DNA fragment comprising a gene coding for the Bgl protein, the gene being naturally present in Streptomyces sp. immediately upstream of a gene coding for an excretable (I) is new.

The gene is pref. naturally present in Strep. lividans 1326 chromosomal DNA. It is pref. carried on a 2.20 kb Bal I-Bgl II fragment mapped with Bal I at 1.19, Stu I at 1.37, Sal I at 1.70, Bcl I at 2.10, Bgl II 2.47 and Bgl II at 3.39 kb. DNA fragment comprising the Streptomyces (I) **promoter** is new. Micro-organism transformed with a DNA fragment above is new.

Prepn. of a DNA fragment carrying a gene coding for an excretable (I) comprises isolation of the gene from a strain of Streptomyces sp. producing (I). Assay of gene expression comprises transformation of a micro-organism with the DNA fragment defined in para. d(B),dfol(B) followed by the determn. of excreted (I) with a chromogenic substrate not readily taken up by host cells.

ABEQ EP 187630 B UPAB: 19930922
A recombinant DNA molecule comprising a DNA fragment containing the **promoter** of the Streptomyces beta-galactosidase gene, not linked to the beta-galactosidase structural gene, which **promoter** is located in the Pst(8.8)-Xmnl(9.9)region of the 7 kb Pstl-Sphl region of Streptomyces lividans strain 1326 chromosomal DNA.

0/1

ABEQ US 4717666 A UPAB: 19930922
Isolated DNA fragment contains the Streptomyces beta-galactosidase gene Streptomyces lividans.

Pref. fragment comprises the 16kb **Sph** **I** region of corresp. chromosomal DNA, esp. the 7kb Pst I-**Sph** **I** region of S. lividans strain 1326 chromasomal DNA. Opt. fragment is contained in plasmic pSKL-1 as vector. DNA fragment contains the **promoter** of the corresp. beta-galactosidase gene not limited to its structural gene, or contains the coding sequence for the enzyme not linked to the gene **promoter**.

USE - As diagnostic or laboratory agent for degradation of lactose and other beta-galactosides.

L8 ANSWER 26 OF 26 MEDLINE on STN DUPLICATE 11
ACCESSION NUMBER: 84107981 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6319098
TITLE: Construction and application of a novel plasmid "ATG vector" for direct expression of foreign genes in

Escherichia coli.
AUTHOR: Nishi T; Sato M; Saito A; Itoh S; Takaoka C; Taniguchi T
SOURCE: DNA (Mary Ann Liebert, Inc.), (1983) Vol. 2, No. 4, pp. 265-73.
Journal code: 8302432. ISSN: 0198-0238.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-K01480
ENTRY MONTH: 198403
ENTRY DATE: Entered STN: 19 Mar 1990
Last Updated on STN: 19 Mar 1990
Entered Medline: 23 Mar 1984

AB A new type of plasmid expression vector was developed for direct expression of foreign genes in Escherichia coli. The plasmid vector, designated pTrS3, carries the E. coli tryptophan (trp) **promoter** and the Shine-Dalgarno (SD) sequence for the trp leader peptide as well as an ATG sequence located 13 bp downstream from the SD sequence. The dG residue of this ATG overlaps with the first dG residue of the single **Sph I** recognition sequence (GCATGC) of the vector DNA. After cleaving pTrS3 DNA by **Sph I**, the 3' protruding **Sph I** ends were converted into blunt ends using the Klenow fragment of E. coli DNA polymerase I. Subsequently, the DNA fragments coding for mature human interferon-beta or for the interferon lacking several aminoterminal amino acids, were ligated to this vector DNA and cloned in E. coli. Interferon activity was detected in the extracts of bacterial strains harboring the recombinant plasmids and the results indicated that the interferon-beta polypeptides without the five aminoterminal amino acids might be less active than the mature form.

=> d ibib abs 1-6
'L-6' IS NOT A VALID FORMAT
In a multifile environment, a format can only be used if it is valid
in at least one of the files. Refer to file specific help messages
or the STNGUIDE file for information on formats available in
individual files.
REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d ibib abs 18 1-6

L8 ANSWER 1 OF 26 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 1
ACCESSION NUMBER: 2005:387728 BIOSIS
DOCUMENT NUMBER: PREV200510172432
TITLE: Construction of recombined plasmid carrying Cry1Ac gene and expression of insecticidal activities in Bacillus subtilis.
AUTHOR(S): Liu Ji-Ning; Liu Xian-Jin [Reprint Author]; Yu Xiang-Yang; Peng Zheng-Qiang
CORPORATE SOURCE: Jiangsu Acad Agr Sci, Nanjing 210014, Peoples R China
jaasliu@jaas.ac.cn
SOURCE: Acta Entomologica Sinica, (JUN 15 2005) Vol. 48, No. 3, pp. 342-346.
CODEN: KCHPA2. ISSN: 0454-6296.
DOCUMENT TYPE: Article
LANGUAGE: Chinese
ENTRY DATE: Entered STN: 28 Sep 2005
Last Updated on STN: 28 Sep 2005

AB The full length sequence of the **promoter** and Cry1Ac gene were obtained by PCR with two pairs of unique primers Cry1AcF/R and PxyF/R respectively, which were designed according to the Cry1Ac gene and

promoter sequence of xylase operon from Bacillus subtilis 168. Then, the fused translational expression vector PxylR-Cry1Ac was constructed using overlapping PCR technique with the primers pair PxyF/Cry1AcR and the mixture of above PCR production. After being digested by **Sph I** and BamH I, PxylR-Cry1Ac expression vector was inserted into E. coli-B. thuringiensis shuttle vector pHT315, and the resulted recombinant plasmids were named as pCry1Ac315. The recombinant plasmids were transferred into B. subtilis laboratory strain JAAS01D. Efficient expression of the Cry 1 Ac gene in the engineered JAAS01D-1Ac was proved with restriction enzyme analysis, SDS-PAGE electrophoresis analysis and insecticidal activity assay.

L8 ANSWER 2 OF 26 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
DUPLICATE 2

ACCESSION NUMBER: 2004:447579 BIOSIS
DOCUMENT NUMBER: PREV200400442204
TITLE: The promoting function of long terminal repeat from reticuendotheliosis virus.
AUTHOR(S): Zhao Wen-ming [Reprint Author]; Ding Jia-bo; Jiang Shi-jin; Cui Zhi-zhong
CORPORATE SOURCE: Coll Anim Husbandy and Vet Med, Yangzhou Univ, Yangzhou, 22500, China
wmzhao@yzu.edu.cn
SOURCE: Virologica Sinica, (June 2004) Vol. 19, No. 3, pp. 255-258. print.
ISSN: 1003-5125.
DOCUMENT TYPE: Article
LANGUAGE: Chinese
ENTRY DATE: Entered STN: 17 Nov 2004
Last Updated on STN: 17 Nov 2004

AB The long terminal repeat (LTR) of Reticuendotheliosis virus (REV) was amplified by PCR technique and cloned into pUC18 vector at the sites of EcoRI and SacI, and the BGH polyadenylation signal sequence was cloned at the sites of **Sph I** and Hind III as a terminor. The positive clone was named pUC-LTR, which was used as a basic expressing vector to validate the activity of LTR. Green fluorescent protein (GFP) and REV envelope glycoprotein 90 (gp90) gene was cloned at the downstream of LTR in the pUC-LTR vector respectively as a reporter. These two recombinants pUC-LTR-GFP and pUC-LTR-gp90 were then transfected into Chicken Embryo Fibroblast (CEF) cells. 48h after the transfection, we could detect the expression of GFP and gp90. This study shows the LTR sequence could be used as a **promoter** to construct expressing vectors.

L8 ANSWER 3 OF 26 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1086400 CAPLUS
DOCUMENT NUMBER: 143:187637
TITLE: Partial Function of **Promoter** and Enhancer of pp38 Gene of Marek's Disease Virus
AUTHOR(S): Ding, Jiabo; Jiang, Shijin; Sun, Shuhong; Wang, Zengfu; Zhang, Jiyuan; Cui, Zhizhong
CORPORATE SOURCE: College of Animal Science, Shandong Agriculture University, Taian, Shandong Province, 271018, Peop. Rep. China
SOURCE: Zhongguo Shouyi Xuebao (2004), 24(1), 6-8
CODEN: ZSXUF5; ISSN: 1005-4545
PUBLISHER: Zhongguo Shouyi Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The 38,000 phosphoprotein gene of Marek's disease virus RB1B strain with its **promoter**, enhancer and terminator was amplified through polymerase chain reaction (PCR). The 2,200 bp PCR produce was cloned into

pUC18 vector via restriction-enzyme Sac I and **Sph I**.
The recombinant plasmid was transfected into chicken embryo fibroblast (CEF) by using liposome. Indirect fluorescent assay (IFA) with mouse-anti pp38 expressed in E. coli was used to identify the expression of pp38, and gray fluorescence on the transfected cells could be seen. It indicated that the **promoter** and enhancer of pp38 gene could be used to construct a new eukaryotic expressing vector.

L8 ANSWER 4 OF 26 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-627614 [59] WPIDS
DOC. NO. CPI: C2003-171566
TITLE: New hybrid plasmid pZZSA coding for a chimeric angiogenin protein useful e.g. for promoting angiogenesis in the treatment of burns, traumatic wounds, hematopoietic disorders, ulcers, varicose veins, endarteritis and skin diseases.
DERWENT CLASS: B04 D16
INVENTOR(S): MAISTRENKO, V F; MERTVETSOV, N P; RAMAZANOV, Y A; RAMAZANOV YU, A; METVETSOV, N P
PATENT ASSIGNEE(S): (MERT-I) MERTVETSOV N P; (RAMA-I) RAMAZANOV Y A; (RAMA-I) RAMAZANOV YU A; (SAYA-R) ZAO SAYANY; (MAIS-I) MAISTRENKO V F; (METV-I) METVETSOV N P
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003064660	A1	20030807	(200359)*	RU	23
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
RU 2221043	C2	20040110	(200414)		
AU 2003221229	A1	20030902	(200422)		
US 2005148061	A1	20050707	(200547)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003064660	A1	WO 2003-RU49	20030130
RU 2221043	C2	RU 2002-102856	20020131
AU 2003221229	A1	AU 2003-221229	20030130
US 2005148061	A1	WO 2003-RU49	20030130
		US 2004-502554	20040722

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003221229	A1 Based on	WO 2003064660

PRIORITY APPLN. INFO: RU 2002-102856 20020131
AN 2003-627614 [59] WPIDS
AB WO2003064660 A UPAB: 20030915
NOVELTY - Hybrid plasmid pZZSA coding for a chimeric angiogenin protein of molecular weight 3814 Md is new.
DETAILED DESCRIPTION - Hybrid plasmid pZZSA coding for a chimeric angiogenin (Ang) protein of molecular weight 3814 Md comprises: a 3720 base pair (bp) XhoI/EcoRI fragment of pGM280 plasmid DNA comprising tandem

Escherichia coli tryptophan operon promoters, a lambda phage transcription terminator, a bla beta -lactamase gene and an origin of replication (ori) sequence; a 2500 bp EcoRI/EcoNI fragment of plasmid pfM comprising a synthetic T7 translation enhancer gene and an Ar gene encoding an amino acid sequence corresponding to base pairs 3988-4845; tandem E. coli tryptophan operon promoters; a synthetic chimeric gene encoding an Ang-Spa fusion protein; a bla beta -lactamase gene serving as an ampicillin resistance marker in pZZSA-transformed E. coli cells; and the following unique restriction sites (coordinates in bp): EcoRI (192), XbaI (276), Bgl II (342), **Sph I** (539), EcoNI (599), Mlu I (1064).

An INDEPENDENT CLAIM is also included for Escherichia coli strain BL21(DE3) pZZSA (MTsKM B-127) - an overproducer of a recombinant chimeric human angiogenin protein.

ACTIVITY - Vulnerary; Vasotropic; Antiulcer; Dermatological; Antipsoriatic.

MECHANISM OF ACTION - Angiogenesis **promoter**. Chicken chorioallantoic membranes incubated for 72-80 hours with 0.1 mg/ml of the protein encoded by pZZSA had 111.8 blood vessels per cm2, compared with 38.7 for membranes incubated with normal saline.

USE - The plasmid is useful for transforming Escherichia coli to produce a recombinant chimeric human angiogenin protein useful e.g. for promoting angiogenesis in the treatment of burns, traumatic wounds, hematopoietic disorders, ulcers, varicose veins, endarteritis and skin diseases, e.g. scleroderma, psoriasis, infectious dermatitis and alopecia.

DESCRIPTION OF DRAWING(S) - The drawing shows a physical map of plasmid pZZSA.

Dwg.1/6

L8 ANSWER 5 OF 26 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2005320250 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15969082
TITLE: Genetically marking of natural biocontrol bacterium Bacillus subtilis strains with green fluorescent protein gene.
AUTHOR: Yao Zhen-Sheng; Chen Zhong-Yi; Chen Zhi-Yi; Zheng Xiao-Bo; Zhang Jie; Huang Da-Fang
CORPORATE SOURCE: State Key Lab for Biology of Plant Diseases and Insect Pests, Institute of Plant Protection Chinese Academy of Agricultural Science, Beijing 100094, China.
SOURCE: Sheng wu gong cheng xue bao = Chinese journal of biotechnology, (2003 Sep) Vol. 19, No. 5, pp. 551-5. Journal code: 9426463. ISSN: 1000-3061.
PUB. COUNTRY: China
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Chinese
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 23 Jun 2005
Last Updated on STN: 15 Dec 2005

AB The full length sequence of the **promoter** and gfp gene were obtained respectively by PCR with two pairs unique primers PxyF/R and primers gfpF/R, which were designed according to the gfp gene and **promoter** sequence of xylase operon from Bacillus subtilis 168, and the DNA template plasmids pHT315-xyIR and pGFPuv. Furthermore, the fused translational expression cassette PxylR-gfp was constructed using overlapping PCR technique with the primers pair PxyF/gfpR and the mixture of above PCR production. After being digested by Kpn I and **Sph I** , PxylR-gfp expression cassette was inserted into E. coli-B. thuringiensis shuttle vecter pHT315 and E. coli-B. subtilis shuttle vecter pRP22, and the resulted recombinant plasmids were named as pGFP315 and pGFP22 respectively. Both recombinant plasmids were transferred into B. subtilis lab strain 168 and the resulted transformants are bright green performance under 365 nm UV light. However, only pGFP22 can be introduced

into the natural strain B916. The transformants containing pGFP22 have bright green performance under 365 nm UV light and was named B916-gfp. Antifungal activities testing results proved that there is no obvious difference between B916 and the engineered strains B916-gfp. Research results also showed that the stability of B916-gfp was 94% after growth about 175 generations at 37 degrees C, and the losing rate of plasmid was less than 3.5 x 10(-4) per generation.

L8 ANSWER 6 OF 26 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 2005320221 IN-PROCESS
DOCUMENT NUMBER: PubMed ID: 15969053
TITLE: Expression of gene aiiA carrying the **promoter** of gene cry3Aa in Bacillus thuringiensis.
AUTHOR: Zhu Chen-Guang; Sun Ming; Yu Zi-Niu
CORPORATE SOURCE: College of Life Science and Technology, Key Laboratory of Agricultural Microbiology of Ministry of Education and Agriculture, Huazhong Agricultural University, Wuhan 430070, China.
SOURCE: Sheng wu gong cheng xue bao = Chinese journal of biotechnology, (2003 Jul) Vol. 19, No. 4, pp. 397-401. Journal code: 9426463. ISSN: 1000-3061.
PUB. COUNTRY: China
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Chinese
FILE SEGMENT: NONMEDLINE; IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 23 Jun 2005
Last Updated on STN: 15 Dec 2005

AB N-acyl-homoserine lactones (AHLs), are widely conserved signal molecules present in quorum-sensing systems of many Gram-negative bacteria. AHLs molecules mediate the expression of virulence genes of a range of bacterial pathogens. Recently, it has been reported that AiiA protein, which widely exists in Bacillus species, can inactivate the AHLs by hydrolyzing the lactone bond of AHLs, thus attenuate the diseases caused by the expression of virulence genes of bacterial pathogens. Bacillus thuringiensis, a type of Gram-positive bacteria, has been used extensively as a microbial insecticide in the last few decades. However, most of important insecticidal B. thuringiensis strains have not been exploited for bacterial disease control because they usually do not produce antibiotics that are effective against bacteria and fungi. The discovery of AiiA protein in B. thuringiensis shows the application potential of B. thuringiensis on biocontrol against bacterial diseases. In this study, in order to construct the B. thuringiensis recombinant strain that has high expression of AiiA protein, the **promoter** of insecticidal crystal protein coding gene cry3Aa of B. thuringiensis was selected. The **promoter** of gene cry3Aa is a non-sporulation **promoter**, it promotes the transcription earlier and longer than the promoters of other cry genes. The **promoter** of AiiA protein coding gene aiiA was replaced with the **promoter** of gene cry3Aa by overlapping PCR, resulting fusion gene pro3A-aiiA. The gene pro3A-aiiA was inserted into shuttle vector pHT304 at site BamH I / **Sph I** , resulting recombinant plasmid pBMB686. The plasmid pBMB686 was introduced into B. thuringiensis acrystalliferous strain BMB171, the resulting strain BMB686 had a higher and more stable expression level of protein AiiA comparing with the parental strain BMB171. Furthermore, the strain BMB686 exhibited stronger ability of AHLs inactivation and much more effective restraint to the potato's soft rot disease caused by Erwinia carotovora than those of the parental strain BMB171. From these results, it was concluded that the B. thuringiensis strain harvesting the fusion gene pro3A-aiiA may be utilized in the future to control bacterial diseases which are mediated by the AHL quorum-sensing signals.

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CA SUBSCRIBER PRICE	-2.25	-2.25

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